

Manpower Standard

ENGINEERING FLIGHT

This Air Force Manpower Standard (AFMS) quantifies the manpower required to accomplish the tasks described in the process oriented description for varying levels of workload. The Engineering Flight provides for cradle-to-grave technical, design, and construction surveillance of operations and maintenance projects by contract and simplified acquisition of base engineering requirements (SABER) projects. Also included are the management and preparation of technical data, studies, and evaluation of these projects, base community and comprehensive planning and programming. This AFMS defines the manpower allowed to support an Objective Wing Engineering Flight at Air Mobility Command, Air Combat Command, US Air Forces Europe, Pacific Air Forces, Air Education and Training Command, 11th Wing, Air Force Academy, Air Force Space Command, Air Force Special Operations Command, and Air Force Materiel Command locations. It does not apply to Air National Guard and Air Force Reserve bases. This AFMS does not apply to flights that have been cost compared (OMB Circular A-76). This AFMS does not apply to locations on the base closure list. This AFMS applies to peacetime operations only. The 23 and 32 series of Air Force publications contain USAF policy and procedural guidance for the Engineering Flight. This AFMS has been developed in accordance with policy and guidance from HQ USAF/XPM, Air Force Center for Quality and Management Innovation (AFCOMI), and AFMAN 38-208, Air Force Management Engineering Program (MEP). Send comments and suggested improvements on AF Form 847, Recommendation for Change of Publication, through channels, to AFCQMI/MQBC, 550 E Street East, Randolph AFB TX 78150-4451.

★SUMMARY OF CHANGES

This AFMS supersedes AFMS 44EC, 9 May 1997. It implements changes associated with Attachment 5. Changes are identified with a star (*).

- 1. Core Composition:
- 1.1. Core Manpower Requirement. 21
- 1.2. Core Manpower Range. 11 99
- 1.3. **Programming Factor.** Total Square Feet of Floor Space.
- 2. Standard Data:
- 2.1. Approval Date. April 1993
- 2.2. Man-hour Data Source. Workshop measurement and Historical Documents Functional Model.
- 2.3. Man-hour Equation:
- 2.3.1. For all standard Engineering Flights at Objective Wing locations. Use the following equation:

Y = 1853 + .4594X1 + 464.9X2

Supersedes AFMS 44EC, 9 May 1997 Certified by: AFCQMI/MQBC (Maj Don Hudson) Pages: 23/Distribution: F

- 2.3.2. **For Falcon AFS.** While the Engineering Flight at Falcon AFS is part of an Objective Civil Engineer Squadron, it does not perform all flight processes in the same manner as the normal Objective Flight. Consequently, the equation in para 2.3.1 above does not apply. The equation for Falcon AFS is Y=30.
- 2.3.3. **For United Kingdom Bases.** United Kingdom bases should use the equation in para 2.3.1 above to determine total requirements. Funding of these requirements will be by a combination of U.S. and UK resources.

2.4. Workload Factors:

- 2.4.1. **Titles:**
- 2.4.1.1. **X1.** Total Square Feet of Floor Space.
- 2.4.1.2. **X2.** Age Switch.
- 2.4.2. **Definitions:**
- 2.4.2.1. **X1.** The total square feet of floor space, expressed in thousands (KSF), for facilities, including MFH, located on the primary installation and at off-base sites with a similar standard of living (see para 2.4.3.2 below).
- 2.4.2.2. **X2.** Each base commissioned prior to 1940 receives a one for this workload driver; all others receive zero.
- 2.4.3. Sources:
- 2.4.3.1. **X1.** Real Property Space Summary by Condition Code Report, PCN: SF100-164, or the comparable WIMS document that reports base square footage to MAJCOM headquarters, divided by 1000.
- 2.4.3.2. **X1.** Off-base Sites. At those sites not receiving the same degree of engineering flight support as the main base, adjustments to the site's square feet count may be required. MAJCOM Civil Engineer and Manpower staffs should develop a mutually agreed-to factor, commensurate with the level of CE engineering support at the site, to adjust the site's square feet count. For example, after considering travel to and from the site and the engineering work that occurs at the site, a factor of .50 would indicate the site receives approximately 50 percent of the level of service per square foot that the main base receives per square foot. The factor is multiplied times the site's square feet count, and the result is added to the count for the main base before dividing by 1000. *Note:* Do not include the site's square feet if it is receiving credit for variances A3.1 and A3.2.
- 2.4.3.3. **X2.** Base-specific Age Switches are at Attachment 5.
- 2.5. Points of Contact:
- 2.5.1. Functional Representative. Mr. Larry Strother, AFCESA/CES.
- 2.5.2. **AFCQMI Representative.** Major Don Hudson, AFCQMI/MQBC, 487-2479.
- **3. Application Instructions:** If manpower for your location is not specified in para 2.3.2 above, use the following procedure:
- 3.1. **Step 1.** The equations contained in all of the Civil Engineering Objective Flight AFMSs were developed in such a manner that their simultaneous application will result in a total reduction at all affected bases equal to that required by DMRD 967. The DMRD 967 reductions were phased in through FY 97.
- 3.2. **Step 2.** Compute the total Engineering Flight core man-hours using the equation in para 2.3 above.
- 3.3. **Step 3.** Determine variance man-hours applicable to the location (Attachment 3). (If the variance is in terms of manpower, convert the manpower to man-hours using the applicable man-hour availability factor (MAF)).
- 3.4. **Step 4.** Add or subtract these man-hours to or from the core man-hours to determine the total man-hours required. Divide the total man-hours by the current MAF and overload factor and round following current rounding rules.
- 3.5. **Manpower Requirements.** The manpower tables address the manpower requirements for core processes only. Due to the unique nature of the variances, skill and grade requirements must be determined on a case-by-case basis. Historical manning, career progression, military/civilian mixes, and Unit Type Code (UTC) posturing requirements must all be considered.

- 3.5.1. **Skill and Grade Distribution for Standard Flights.** For standard flights, determine skill and grade distribution using the manpower table at Attachment 2.
- 3.5.1.1. The number of core military officer positions for this flight is three. The CSAF approved additional officer (company grade) authorizations at the bases listed below. All other locations, where this AFMS applies, earn only three officers. The additional officer(s) does not add to the total size of the flight, rather it (they) replaces civilian 32E3 requirements on a one-for-one basis. (Ref HQ USAF/CEO message, 221900Z Mar 94.)

	TOTAL NUMBER OF ENG FLT OFFICERS		TOTAL NUMBER OF ENG FLT OFFICERS
Air Force Academy	4	Travis	5
Ramstein	5	Eielson	6
Spangdahlem	4	Kadena	4
Langley	4	Kunsan	4
Minot	5	Osan	5
Mountain Home	4		
Nellis	4		
Offutt	7		

- 3.5.1.2. The Chief of the Engineering Flight is a civilian position.
- 3.5.1.3. Two SABER positions were estimated for the SABER contract workload at a "core" base, one dedicated engineer and one planner. To support SABER project planning, the Chief of the Engineering Flight may elect to convert one to three 7-level 3E571 positions to CE craft AFSCs.
- 3.5.1.4. When earned, the CMSgt may be assigned the additional duty of Advisor to the Commander.
- 3.5.2. **Skill and Grade Requirements for Nonstandard Flights.** Skill and grade requirements for nonstandard flights (UK bases and Falcon AFS) require special handling. As with variances, historical manning, career progression, military/civilian mixes, and UTC posturing requirements must all be considered.

4. Statement of Conditions (SOC):

- 4.1. This standard combines the duties of comprehensive planning, program development, project design, and construction management using the cradle-to-grave concept (design concept to final acceptance) utilizing engineers, draftsmen, programmers, and construction managers as a cohesive team. Program Management responsibilities such as Pavements and Traffic Programs, management of Recurring and Nonrecurring Service Contracts, and updates to "as-builts" and nondesign drafting support are not covered by this standard, but are the responsibility of the Operations Flight. All processes and variances include both direct and indirect man-hours. This flight normally operates eight hours a day, five days a week, except during emergencies and exercises.
- 4.2. The following are assumptions made about core capability:
- 4.2.1. Operations Flight Maintenance Engineering element maintains all utility tabs.
- 4.2.2. Environmental flight will manage wetlands and historical facilities.
- 4.2.3. Average in-house design capability is \$250,000 per year per degrade design engineer/architect.
- 4.2.4. Three to one is the amount that can be designed employing outside A-E firms, i.e., an in-house design professional can manage the A-E design of three times the dollar value that could be designed in-house.

Avg DSN in-house/engnr = \$250K/yr Avg DSN A-E/engnr = \$750K/yr

\$240K A-E design funds available to supplement in-house capability to execute the following:

\$2.7 O&M, Medical, NAF, Etc.

0.7 MFH

\$3.4 Mil total design and construction program

- 4.2.5. Contract inspector's capability is an average of three active projects at one time.
- 4.2.6. Average construction project has 180 calendar day performance period.
- 4.2.7. Core base will have one MILCON project/yr.
- 4.2.8. The Engineering Flight will provide program development, design, and construction support for all projects by contract.
- 4.3. Manpower estimates for the nonstandard flights (para 2.4.2 above) were made by MAJCOM Integration Review Team 2 and approved by the AF/CE. Estimates include core and variance workload as well as indirect man-hours.

GREGORY A. KEETHLER, Colonel, USAF Chief, Installations and Support Division Air Force Center for Quality and Management Innovation

Attachments

- 1. Process Oriented Description
- 2. Manpower Table
- 3. Variances
- 4. Process Analysis Summary
- 5. Base Age Switch

PROCESS ORIENTED DESCRIPTION

ENGINEERING FLIGHT

A1.1. ATTENDS WAR TRAINING:

- A1.1.1. ATTENDS PHASE I TRAINING.
- A1.1.2. ATTENDS PHASE II TRAINING.

A1.2. MANAGES BASE COMPREHENSIVE PLAN (BCP):

- A1.2.1. PERFORMS SITING:
- A1.2.1.1. INVESTIGATES SITE CONDITION.
- A1.2.1.2. SURVEYS PROJECT SITE.
- A1.2.2. PREPARES WAIVER (TO SAFETY OR AIRFIELD CRITERIA):
- A1.2.2.1. COORDINATES WITH DIRECTOR OF OPERATIONS, LOCAL COMMUNITY, AND FAA.
- A1.2.2.2. PREPARES WAIVER DOCUMENTATION.
- A1.2.3. MANAGES THE BASE COMPREHENSIVE PLAN:
- A1.2.3.1. REQUESTS/OBTAINS INPUTS FROM APPROPRIATE AGENCY.
- A1.2.3.2. DEVELOPS BCP TABS.
- A1.2.3.3. COORDINATES BCP TABS WITH APPROPRIATE AGENCY.
- A1.2.3.4. PUBLISHES BCP.
- A1.2.4. MANAGES AREA DEVELOPMENT PLAN (ADP):
- A1.2.4.1. REQUESTS/OBTAINS INPUTS FROM APPROPRIATE AGENCY.
- A1.2.4.2. DEVELOPS ADP.
- A1.2.4.3. COORDINATES ADP WITH APPROPRIATE AGENCY.
- A1.2.4.4. PUBLISHES ADP.
- A1.2.5. PERFORMS COORDINATION WITH LOCAL COMMUNITY.

A1.3. MANAGES CONTRACT PROGRAM:

- A1.3.1. DEVELOPS PROJECT DOCUMENT:
- A1.3.1.1. PREPARES BID SCHEDULE.
- A1.3.1.2. REPRODUCES DRAWING AND SPECIFICATION.
- A1.3.1.3. ESCORTS PROSPECTIVE BIDDER TO JOB SITE.
- A1.3.1.4. ATTENDS PRE-BID CONFERENCE.
- A1.3.1.5. ATTENDS BID-OPEN CONFERENCE.
- A1.3.1.6. ATTENDS PRE-CONSTRUCTION CONFERENCE.
- A1.3.1.7. REVIEWS MATERIAL SUBMITTAL.
- A1.3.1.8. INVESTIGATES CHANGE IN SITE CONDITION.
- A1.3.1.9. INITIATES CONTRACT MODIFICATION.
- A1.3.1.10. ATTENDS FINAL ACCEPTANCE INSPECTION.
- A1.3.1.11. PREPARES DESIGN AND CONSTRUCTION MANAGEMENT REPORT.
- A1.3.2. DEVELOPS CONTRACT PROGRAM:
- A1.3.2.1. DEVELOPS STATEMENT OF WORK (SOW).
- A1.3.2.2. PROVIDES DATA FOR PUBLICATION.
- A1.3.2.3. PREPARES AND MAINTAINS ARCHITECTURAL-ENGINEERING (A-E) QUALIFICATION FILE.
- A1.3.2.4. PARTICIPATES ON SELECTION BOARD OF A-E SERVICE.
- A1.3.2.5. CONFERS AND NEGOTIATES WITH PROSPECTIVE A-E FIRM.
- A1.3.2.6. REVIEWS TECHNICAL WORK AND SERVICE OF A-E FIRM.
- A1.3.2.7. PREPARES REPORT OF A-E CONTRACT AWARD.
- A1.3.2.8. PREPARES PERFORMANCE EVALUATION REPORT.
- A1.3.3. INPUTS INITIAL PROJECTS (PROJECT CONTRACT MANAGEMENT SYSTEM (PCMS) AND PROGRAMMING, DESIGN, AND CONSTRUCTION (PDC)) AND UPDATES/REVISES PROGRAM IN PCMS.
- A1.3.4. PROVIDES TECHNICAL SUPPORT.

A1.4. MANAGES DESIGN PROJECT:

- A1.4.1. CONDUCTS PRE-DESIGN ACTIVITIES:
- A1.4.1.1. CONFERS WITH USING AGENCY.
- A1.4.1.2. ASSISTS CONTRACT PROGRAMMER IN PREPARATION OF DD FORM 1391, FY 19__ MILITARY CONSTRUCTION PROGRAM.
- A1.4.1.3. PERFORMS SITE SURVEY.
- A1.4.2. DESIGNS PROJECT:
- A1.4.2.1. PREPARES LAYOUT OF WORK SKETCHES, INFORMATION, AND PERFORMS DESIGN ANALYSIS.
- A1.4.2.2. PREPARES PROJECT SPECIFICATION.
- A1.4.2.3. DEVELOPS COST ESTIMATE.
- A1.4.2.4. DRAFTS DESIGN.
- A1.4.2.5. FINALIZES DESIGN.
- A1.4.3. MANAGES ARCHITECTURAL-ENGINEERING (A-E), CORPS OF ENGINEERS, OR OTHER GOVERNMENT AGENCY DESIGNS:
- A1.4.3.1. DEVELOPS STATEMENT OF WORK.
- A1.4.3.2. PROVIDES DATA FOR PUBLICATION.
- A1.4.3.3. PREPARES AND MAINTAINS A-E QUALIFICATION FILE.
- A1.4.3.4. PARTICIPATES ON SELECTION BOARD OF A-E SERVICE.
- A1.4.3.5. REVIEWS TECHNICAL WORK AND SERVICE OF A-E FIRM OR OTHER GOVERNMENT AGENCIES.
- A1.4.3.6. PREPARES REPORT OF A-E CONTRACT AWARD.
- A1.4.3.7. PREPARES PERFORMANCE EVALUATION REPORT.
- A1.4.3.8. PREPARES PROJECT PACKAGE FOR PROCUREMENT.
- A1.4.3.9. ESCORTS PROSPECTIVE BIDDER TO JOB SITE.
- A1.4.3.10. ATTENDS PRE-BID CONFERENCE.
- A1.4.3.11. ATTENDS PRE-BID OPEN CONFERENCE.
- A1.4.3.12. ATTENDS PRE-CONSTRUCTION CONFERENCE.
- A1.4.3.13. REVIEWS MATERIAL SUBMITTAL.
- A1.4.3.14. CONFERS WITH INVESTIGATOR.
- A1.4.3.15. INITIATES CONTRACT MODIFICATION.
- A1.4.3.16. ATTENDS FINAL ACCEPTANCE INSPECTION.

A1.5. PERFORMS CONSTRUCTION MANAGEMENT:

- A1.5.1. CONDUCTS PRE-CONSTRUCTION ACTIVITIES:
- A1.5.1.1. CONDUCTS PRE-SITE VISIT.
- A1.5.1.2. REVIEWS PROJECT DESIGN.
- A1.5.1.3. ATTENDS BID OPENING.
- A1.5.1.4. PROVIDES TECHNICAL SUPPORT.
- A1.5.2. MANAGES CONSTRUCTION PROJECT:
- A1.5.2.1. COORDINATES WITH CONTRACTOR.
- A1.5.2.2. SCHEDULES OUTAGE.
- A1.5.2.3. REVIEWS CONTRACTOR SCHEDULE/SUBMITTAL.
- A1.5.2.4. PERFORMS PROJECT INSPECTION.
- A1.5.3. MANAGES SABER CONSTRUCTION:
- A1.5.3.1. COORDINATES WITH CONTRACTOR.
- A1.5.3.2. SCHEDULES OUTAGE.
- A1.5.3.3. REVIEWS CONTRACTOR SCHEDULE/SUBMITTAL.
- A1.5.3.4. PERFORMS PROJECT INSPECTION.

MANPOWER TABLE															
WORK CENTER	WORK CENTER/FAC					APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70												
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT												
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1				
Civil Engr, Architect/															
Architectural Engr	32E3A	CPT						1	1	1	1				
Civil Engr, Civil Engr	32E3C	CPT	1	1	1	1	1	1	1	1	1				
Civil Engr, Electrical Engr	32E3E	CPT	1	1	1	1	1	1	1	1	1				
Civil Engr, Mechanical Engr	32E3F	CPT				1	1	1	1	1	1				
Civil Engr, General Engr	32E3G	CPT					1	1	2	2	2				
Civil Engr, Architect/															
Architectural Engr	32E3A	LT													
Civil Engr, Civil Engr	32E3C	LT	1	1	1	1	1	1	1	1	1				
Civil Engr, Electrical Engr	32E3E	LT													
Civil Engr, Mechanical Engr	32E3F	LT				1	1	1	1	1	1				
Civil Engr, General Engr	32E3G	LT	1	1	1										
Engineering Mgr	3E000	CMS													
Engineering Supt	3E591	SMS													
Engineering Crftmn	3E571	MSG	1	1	1	1	1	1	1	1	1				
Engineering Crftmn	3E571	TSG	1	1	1	_	1	1	1	2	2				
Engineering Jrnymn	3E551	SSG	1	2	2 2		2	2	2	2	3				
Engineering Jrnymn	3E551	*SRA	1	1			2	2	2	2	2				
Engineering Apr	3E531	A1C	1	1	1	1	1	1	1	1	1				
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1				
Information Mgt Jrnymn	3A051	SSG													
*A 2A051 may be substituted for - 2F	2551														
*A 3A051 may be substituted for a 3E See para 3.5.1 of the basic AFMS for S		ctions for Mi	1/Civ n	nix											
TOTAL	Special monu	Carons for WI	11	12	13	14	15	16	17	18	19				
IOIAL			11	12	1.3	1+	13	10	1/	10	17				

		MANPOWE	R TAB	LE								
WORK CENTER	/FAC		APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70									
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT									
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1	
Civil Engr, Architect/												
Architectural Engr	32E3A	CPT	1	1	1	1	1	1	1	1	1	
Civil Engr, Civil Engr	32E3C	CPT	1	1	1	1	1	1	1	1	1	
Civil Engr, Electrical Engr	32E3E	CPT	1	1	1	1	1	1	1	1	1	
Civil Engr, Mechanical Engr	32E3F	CPT	1	1	1	1	1	1	1	1	1	
Civil Engr, General Engr	32E3G	CPT	2	2	2	2	2	2	2	2	2	
Civil Engr, Architect/												
Architectural Engr	32E3A	LT										
Civil Engr, Civil Engr	32E3C	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, Electrical Engr	32E3E	LT			1	1	1	1	1	1	1	
Civil Engr, Mechanical Engr	32E3F	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, General Engr	32E3G	LT						1	1	1	1	
Engineering Mgr	3E000	CMS										
Engineering Supt	3E591	SMS										
Engineering Crftmn	3E571	MSG	1	1	1	1	1	1	1	1	1	
Engineering Crftmn	3E571	TSG	2	2	2	3	3	3	3	3	3	
Engineering Jrnymn	3E551	SSG	3	3	3	3	4	4	4	4	4	
Engineering Jrnymn	3E551	*SRA	2	3	3	3	3	3	3	3	4	
Engineering Apr	3E531	A1C	2	2	2	2	2	2	3	3	3	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1	
Information Mgt Jrnymn	3A051	SSG								1	1	
*A 3A051 may be substituted for a 3E					,	II.	1	ı	ı			
See para 3.5.1 of the basic AFMS for S	Special Instru	ections for Mi				22	<u> </u>	اء و	اء			
TOTAL			20	21	22	23	24	25	26	27	28	

		MANPOWI	ER TABI	LE								
WORK CENTER	/FAC		APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70									
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT									
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1	
Civil Engr, Architect/												
Architectural Engr	32E3A	CPT	1	1	1	1	1	1	1	1	1	
Civil Engr, Civil Engr	32E3C	CPT	1	1	1	1	2	2	2	1	1	
Civil Engr, Electrical Engr	32E3E	CPT	1	1	1	1	1	1	2	2	2	
Civil Engr, Mechanical Engr	32E3F	CPT	1	2	2	2	2	2	2	2	2	
Civil Engr, General Engr	32E3G	CPT	2	2	2	2	2	2	2	2	2	
Civil Engr, Architect/												
Architectural Engr	32E3A	LT										
Civil Engr, Civil Engr	32E3C	LT	1	1	2	2	2	2	2	2	2	
Civil Engr, Electrical Engr	32E3E	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, Mechanical Engr	32E3F	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, General Engr	32E3G	LT	1	1	1	1	1	1	1	2	2	
Engineering Mgr	3E000	CMS										
Engineering Supt	3E591	SMS	1	1		1	1			1	1	
Engineering Crftmn	3E571	MSG	1	1	1	1	1	1	1	1	1	
Engineering Crftmn	3E571	TSG SSG	3 4	3 4	3	3	3	3 4	3	3	3 5	
Engineering Jrnymn	3E551 3E551	*SRA	4	4	4	4 5	5	5	5	5	5	
Engineering Jrnymn Engineering Apr	3E531	A1C	4	4	4	4	4	5	5	5	6	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1	
Information Mgt Jrnymn	3A071	SSG	1	1	1	1	1	1	1	1	1	
information Mgt Jrnymn	3A031	330	1	1	1	1	1	1	1	1	1	
											ļ	
											ļ	
*A 3A051 may be substituted for a 3E	'551											
See para 3.5.1 of the basic AFMS for S		ctions for Mi	l/Civ mi	х.								
TOTAL	T		29	30	31	32	33	34	35	36	37	
		1		20	0.1	22	55	٠. ا	22	20	21	

		MANPOWE	ER TABI	LE									
WORK CENTER	/FAC		APPLICABILITY MAN-HOUR RANGE										
ENGINEERING FLIG	ENGINEERING FLIGHT/44EC			1554.08 - 17552.70									
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT										
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1		
Civil Engr, Architect/													
Architectural Engr	32E3A	CPT	1	1	1	1	1	1	1	1	1		
Civil Engr, Civil Engr	32E3C	CPT	1	2	2	2	2	2	2	2	2		
Civil Engr, Electrical Engr	32E3E	CPT	2	2	2	2	2	2	2	2	2		
Civil Engr, Mechanical Engr	32E3F	CPT	2	2	3	3	3	3	3	3	3		
Civil Engr, General Engr	32E3G	CPT	2	2	2	2	2	2	3	3	3		
Civil Engr, Architect/													
Architectural Engr	32E3A	LT											
Civil Engr, Civil Engr	32E3C	LT	2	2	2	2	2	2	2	2	2		
Civil Engr, Electrical Engr	32E3E	LT	1	1	1	2	2	2	2	2	2		
Civil Engr, Mechanical Engr	32E3F	LT	1	1	1	1	1	1	1	1	1		
Civil Engr, General Engr	32E3G	LT	2	2	2	2	2	2	2	2	2		
Engineering Mgr	3E000	CMS											
Engineering Supt	3E591	SMS	1	1	1	1	1	1	1	1	1		
Engineering Crftmn	3E571	MSG	1	1	1	1	1	1	1	1	1		
Engineering Crftmn	3E571	TSG	3	3	3	3	3	3	3	3	3		
Engineering Jrnymn	3E551	SSG	5	5	5	5	5	6	6	6	6		
Engineering Jrnymn	3E551	*SRA	5	5	5	5	6	6	6	6	6		
Engineering Apr	3E531	A1C	6	6	6	6	6	6	6	7	7		
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1		
Information Mgt Jrnymn	3A051	SSG	1	1	1	1	1	1	1	1	2		
*A 3A051 may be substituted for a 3E	E551.												
See para 3.5.1 of the basic AFMS for S		ictions for Mi	l/Civ mi	х.									
TOTAL			38	39	40	41	42	43	44	45	46		

		MANPOW	ER TAB	LE									
WORK CENTER	/FAC			APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70										
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT										
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1		
Civil Engr, Architect/													
Architectural Engr	32E3A	CPT	1	1	1	1	1	1	1	2	2		
Civil Engr, Civil Engr	32E3C	CPT	2	2	2	2	2	2	3	3	3		
Civil Engr, Electrical Engr	32E3E	CPT	2	2	2	2	2	2	2	2	2		
Civil Engr, Mechanical Engr	32E3F	CPT	3	3	3	3	3	3	3	3	3		
Civil Engr, General Engr	32E3G	CPT	3	3	3	3	3	3	3	3	3		
Civil Engr, Architect/	22524	1.70		1			1	1					
Architectural Engr	32E3A	LT	1	1	1	1	1	1	1	1	1		
Civil Engr, Civil Engr	32E3C	LT	2 2	2 2	2	2	2 2	2 2	2 2	2 2	2		
Civil Engr. Machanical Engr	32E3E 32E3F	LT LT	1	1	2	2 2	2	2	2	2	2 2		
Civil Engr, Mechanical Engr Civil Engr, General Engr	32E3F 32E3G	LT	2	2	2	2	2	2	2	2	2		
Engineering Mgr	3E000	CMS	2	2	2	2	2	2	2	2	2		
Engineering Supt	3E591	SMS	1	1	1	1	1	1	1	1	1		
Engineering Crftmn	3E571	MSG	1	1	2	2	2	2	2	2	2		
Engineering Crftmn	3E571	TSG	3	3	3	3	3	4	4	4	4		
Engineering Jrnymn	3E551	SSG	6	6	6	6	6	6	6	6	6		
Engineering Jrnymn	3E551	*SRA	6	7	7	7	7	7	7	7	8		
Engineering Apr	3E531	A1C	7	7	7	7	7	7	7	7	7		
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1		
Information Mgt Jrnymn	3A051	SSG	2	2	2	2	3	3	3	3	3		
*A 3A051 may be substituted for a 3E	E551.		1	J		· ·	<u>I</u> _	· ·	· ·				
See para 3.5.1 of the basic AFMS for	Special Instru	ictions for M	il/Civ mi	ix.									
TOTAL			47	48	49	50	51	52	53	54	55		

		MANPOWI	ER TAB	LE								
WORK CENTER	/FAC		APPLICABILITY MANPOWER RANGE									
ENGINEERING FLIG	HT/44EC			1554.08 - 17552.70								
AIR FORCE SPECIALTY TITLE	AFSC	GRADE		MANPOWER REQUIREMENT								
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1	
Civil Engr, Architect/												
Architectural Engr	32E3A	CPT	2	2	2	2	2	2	2	2	3	
Civil Engr, Civil Engr	32E3C	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Electrical Engr	32E3E	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Mechanical Engr	32E3F	CPT	3	3	3	3	4	4	4	4	4	
Civil Engr, General Engr	32E3G	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Architect/												
Architectural Engr	32E3A	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, Civil Engr	32E3C	LT	2	2	3	3	3	3	3	3	3	
Civil Engr, Electrical Engr	32E3E	LT	2	2	2	2	2	2	2	2	2	
Civil Engr, Mechanical Engr	32E3F	LT	2	2	2	2	2	2	2	2	2	
Civil Engr, General Engr	32E3G	LT	2	2	2	2	2	2	3	3	3	
Engineering Mgr	3E000	CMS										
Engineering Supt	3E591	SMS	1	1	1	1	1	1	1	1	1	
Engineering Crftmn	3E571	MSG	2	2	2	2	2	3	3	3	3	
Engineering Crftmn	3E571	TSG	4	5	5	5	5	5	5	5	5	
Engineering Jrnymn	3E551	SSG	6	6	6	7	7	7	7	7	7	
Engineering Jrnymn	3E551	*SRA	8	8	8	8	8	8	8	8	8	
Engineering Apr	3E531	A1C	7	7	7	7	7	7	7	8	8	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1	
Information Mgt Jrnymn	3A051	SSG	3	3	3	3	3	3	3	3	3	
*A 3A051 may be substituted for a 3E See para 3.5.1 of the basic AFMS for S		ctions for Mi	il/Civ mi	ix.			•	•	•			
TOTAL			56	57	58	59	60	61	62	63	64	
2021112			50	٥,	23	27	50	31		33	0.1	

		MANPOWI	ER TAB	LE								
WORK CENTER	/FAC		APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70									
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT									
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1	
Civil Engr, Architect/												
Architectural Engr	32E3A	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Civil Engr	32E3C	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Electrical Engr	32E3E	CPT	3	3	3	3	4	4	4	4	4	
Civil Engr, Mechanical Engr	32E3F	CPT	4	4	4	4	4	4	4	4	4	
Civil Engr, General Engr	32E3G	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Architect/												
Architectural Engr	32E3A	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, Civil Engr	32E3C	LT	3	3	3	3	3	3	3	3	3	
Civil Engr, Electrical Engr	32E3E	LT	2	2	3	3	3	3	3	3	3	
Civil Engr, Mechanical Engr	32E3F	LT	2	2	2	2	2	2	2	2	2	
Civil Engr, General Engr	32E3G	LT	3	3	3	3	3	3	3	4	4	
Engineering Mgr	3E000	CMS										
Engineering Supt	3E591	SMS	1	1	1	1	1	1	1	1	1	
Engineering Crftmn	3E571	MSG	3	3	3	3	3	3	3	3	3	
Engineering Crftmn	3E571	TSG	6	6	6	6	6	6	6	6	6	
Engineering Jrnymn	3E551	SSG	7	7	7	7	7	7	8	8	8	
Engineering Jrnymn	3E551	*SRA	8	9	9	10	10	10	10	10	10	
Engineering Apr	3E531	A1C	8	8	8	8	8	9	9	9	10	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1	
Information Mgt Jrnymn	3A051	SSG	3	3	3	3	3	3	3	3	3	
*A 3A051 may be substituted for a 3E	E551.											
See para 3.5.1 of the basic AFMS for S		ctions for Mi	il/Civ mi	ix.								
TOTAL			65	66	67	68	69	70	71	72	73	

		MANPOWI	ER TAB	LE								
WORK CENTER	Z/FAC		APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIC	ENGINEERING FLIGHT/44EC			1554.08 - 17552.70								
AIR FORCE SPECIALTY TITLE	AFSC	GRADE			MANP	OWER	REQU	IREME	NT			
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1	
Civil Engr, Architect/												
Architectural Engr	32E3A	CPT	3	3	3	3	3	3	3	3	3	
Civil Engr, Civil Engr	32E3C	CPT	4	4	4	4	4	4	4	4	4	
Civil Engr, Electrical Engr	32E3E	CPT	4	4	4	4	4	4	4	4	4	
Civil Engr, Mechanical Engr	32E3F	CPT	4	5	5	5	5	5	5	5	5	
Civil Engr, General Engr	32E3G	CPT	3	3	4	4	4	4	5	5	5	
Civil Engr, Architect/												
Architectural Engr	32E3A	LT	1	1	1	1	1	1	1	1	1	
Civil Engr, Civil Engr	32E3C	LT	3	3	3	3	3	3	3	3	3	
Civil Engr, Electrical Engr	32E3E	LT	3	3	3	4	4	4	4	4	4	
Civil Engr, Mechanical Engr	32E3F	LT	2	2	2	2	2	2	2	2	2	
Civil Engr, General Engr	32E3G	LT	4	4	4	4	4	4	4	4	4	
Engineering Mgr	3E000	CMS										
Engineering Supt	3E591	SMS	1	1	1	1	1	1	1	1	1	
Engineering Crftmn	3E571	MSG	3	3	3	3	3	3	3	3	3	
Engineering Crftmn	3E571	TSG	6	6	6	6	6	6	6	6	6	
Engineering Jrnymn	3E551	SSG	8	8	8	8	8	9	9	9	9	
Engineering Jrnymn	3E551	*SRA	10	10	10	10	11	11	11	11	11	
Engineering Apr	3E531	A1C	10	10	10	10	10	10	10	11	11	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	1	
Information Mgt Jrnymn	3A051	SSG	3	3	3	3	3	3	3	3	4	
<i>g ,</i>												
*A 3A051 may be substituted for a 3.	E551.											
See para 3.5.1 of the basic AFMS for		ictions for Mi	l/Civ mi	ix.								
TOTAL			74	75	76	77	78	79	80	81	82	

		MANPOWE	ER TAB	LE								
WORK CENTER	/FAC		APPLICABILITY MAN-HOUR RANGE									
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70									
AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT									
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	1	
Civil Engr, Architect/												
Architectural Engr	32E3A	CPT	3	3	3	3	3	3	3	4	4	
Civil Engr, Civil Engr	32E3C	CPT	4	4	4	4	4	4	5	5	5	
Civil Engr, Electrical Engr	32E3E	CPT	4	4	4	4	4	4	4	4	4	
Civil Engr, Mechanical Engr	32E3F	CPT	5	5	5	5	5	5	5	5	5	
Civil Engr, General Engr	32E3G	CPT	5	5	5	5	5	5	5	5	5	
Civil Engr, Architect/												
Architectural Engr	32E3A	LT	2	2	2	2	2	2	2	2	2	
Civil Engr, Civil Engr	32E3C	LT	3	3	3	3	3	3	3	3	3	
Civil Engr, Electrical Engr	32E3E	LT	4	4	4	4	4	4	4	4	4	
Civil Engr, Mechanical Engr	32E3F	LT	2	2	2	3	3	3	3	3	3	
Civil Engr, General Engr	32E3G	LT	4	4	4	4	4	4	4	4	4	
Engineering Mgr	3E000	CMS	1		4	1	1		1	1	1	
Engineering Supt	3E591	SMS	1	1	1	1	1	1	1	4	4	
Engineering Crftmn	3E571	MSG	3	3	4	4	4	4	4 7	4 7	4	
Engineering Crftmn	3E571 3E551	TSG SSG	6 9	6 9	6 9	6 9	6	7	9	9	7 9	
Engineering Jrnymn Engineering Jrnymn	3E551	*SRA	11	12	12	12	12	12	12	12	13	
Engineering Apr	3E531	A1C	11	11	11	11	12	12	12	12	12	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	12	
Information Mgt Jrnymn	3A071	SSG	4	4	4	4	4	4	4	4	1	
information wgt frilyinn	3A031	330	4	4	4	4	4	4	4	4	4	
*A 3A051 may be substituted for a 3E		uations for M.	1/C: ·	1		•	<u>'</u>	•	•			
See para 3.5.1 of the basic AFMS for S TOTAL	speciai instru	ICTIONS TOF IMI	83	84	85	86	87	88	89	90	91	
IUIAL		1	83	84	85	86	87	88	89	90	91	

		MANPOWE	ER TAB	LE							
WORK CENTER	/FAC			APPLICABILITY MAN-HOUR RANGE							
ENGINEERING FLIG	HT/44EC		1554.08 - 17552.70								
AIR FORCE SPECIALTY TITLE	AFSC	MANPOWER REQUIREMENT									
Civil Engr, General Engr	32E3G	MAJ	1	1	1	1	1	1	1	1	
Civil Engr, Architect/											
Architectural Engr	32E3A	CPT	4	4	4	4	4	4	4	4	
Civil Engr, Civil Engr	32E3C	CPT	5	5	5	5	5	5	5	5	
Civil Engr, Electrical Engr	32E3E	CPT	5	5	5	5	5	5	5	5	
Civil Engr, Mechanical Engr	32E3F	CPT	5	5	5	5	6	6	6	6	
Civil Engr, General Engr	32E3G	CPT	5	5	5	5	5	5	5	5	
Civil Engr, Architect/											
Architectural Engr	32E3A	LT	2	2	2	2	2	2	2	2	
Civil Engr, Civil Engr	32E3C	LT	3	3	4	4	4	4	4	4	
Civil Engr, Electrical Engr	32E3E	LT	4	4	4	4	4	4	4	4	
Civil Engr, Mechanical Engr	32E3F	LT	3	3	3	3	3	3	3	3	
Civil Engr, General Engr	32E3G	LT	4	4	4	4	4	4	5	5	
Engineering Mgr	3E000	CMS	1	1	1	1	1	1	1	1	
Engineering Supt	3E591	SMS	4	4	4		4	_	_	_	
Engineering Crftmn Engineering Crftmn	3E571 3E571	MSG TSG	4 7	8	4 8	4 8	4 8	5 8	5 8	5 8	
Engineering Jrnymn	3E571 3E551	SSG	9	9	9	10	10	10	10	10	
Engineering Jrnymn Engineering Jrnymn	3E551	*SRA	13	13	13	13	13	13	13	14	
Engineering Apr	3E531	A1C	12	12	12	12	12	12	12	12	
Information Mgt Crftmn	3A071	TSG	1	1	1	1	1	1	1	1	
Information Mgt Jrnymn	3A051	SSG	4	4	4	4	4	4	4	4	
information wigt straymin	371031	550					1			٦	
*A 3A051 may be substituted for a 3E											
See para 3.5.1 of the basic AFMS for S	Special Instru	ctions for Mi			1	1	ı	1	1	1	
TOTAL			92	93	94	95	96	97	98	99	

VARIANCES

PART I Approved Variances

VARIANCE NUMBER	TITLE
A3.1	Support of Range Facility Projects
A3.2	Missile Engineering Flights Supporting Intercontinental Ballistic Missile Sites (ICBMS).
A3.3	Technical Translation (Language) Overseas (O/S).
A3.4	No Active Runways at an Installation.
A3.5	Hospitals With More Than 35 Beds.
A3.6	Base Operations and Maintenance Service Contracts.
A3.7	Leveling.
A3.8	Facilities Planning Support.
A3.9	Depot Support Technology Center.

PART 2 Disallowed Variances. The following variances were considered during the development of this AFMS, but, due to various reasons, were disallowed by the AF/CE, AF/XP, MAJCOM Integration Review Teams, or the Objective Flight Study Team. Therefore, they did not receive a special variance manpower allocation. Reasons for the decision were resource limitations, work considered to be in the core or other variances, work normally contracted, work not the responsibility of the BCE, and work considered to be at a standard higher than an acceptable level. Related work processes are not prohibited, but when required, must be accomplished within available resources.

- Auxiliary/Collocated Operating Base (COB) Airfields.
- Multiple Active/Complex (Non-Auxiliary/COB) Runways.
- Airborne Command Post and Survival, Endurance Command Center.
- 4. Historical Significance of Base.
- 5. Base Produced Water.
- 6. Central Heating Plant and Wastewater Treatment System Project.
- 7. Industrial Non-Appropriated Fund Projects.
- 8. MAJCOM/Base Combined Duties.
- 9. Medical Facility With More Than 300 Beds.
- 10. Total Energy Plant.
- 11. MFH Support.
- 12. MAJCOM Plans and Program Function.
- 13. MAJCOM Design and Construction Management Function.
- 14. Expanded Post Acquisition Improvement Program.
- 15. Expanded MILCON Program.
- 16. Program, Design, and Inspection Project Kadena/Ramstein High Tech Facilities Maintenance.
- 17. Tenant Organization Support.
- 18. Aging Facilities.
- 19. Geographic Information System Implementation Environmental Requirements.
- 20. Corrosion Control.
- 21. Additional Wastewater Treatment Plants.
- 22. Aerostat Site Support Air Installation Capability Use Zone (AICUZ).
- 23. Site Travel.
- 24. Historical MFH and Other Facilities.
- 25. Central Heating Plant, Chiller.
- 26. Host Nation Construction (HNC) Program.
- 27. Program Design & Inspection of MFH Units.
- 28. Large Number of MFH at Kadena/Ramstein.
- 29. Ramstein MFH Units.

VARIANCES

ENGINEERING FLIGHT

- **A3.1. Title.** Positive Mission Variance for Ranges.
- A3.1.1. **Definition.** Provides man-hours for design and construction support that is provided by the host base Engineering Flight for large-range contracted facility projects.

A3.1.2. Applicability and Impact:

BASE	MAN-HOURS	BASE	MAN-HOURS
Edwards	160.70	Luke	160.70
Eglin	160.70	Nellis	160.70
Eielson	160.70	Vandenberg	160.70
Hill	160.70		

- A3.1.3. **Source of Impact.** Workshop measurement.
- A3.1.4. **Special Application Instructions.** Applies only to the seven bases listed above that support ranges over one million acres.
- A3.2. Title. Positive Mission Variance for Missile Engineering Flights Supporting Intercontinental Ballistic Missiles.
- A3.2.1. **Definition.** Provides the man-hours for a missile engineering element in Civil Engineering Squadrons providing Real Property/Real Property Installed Equipment Support to a Missile Complex.

A3.2.2. Applicability and Impact:

BASE	MAN-HOURS	BASE	MAN-HOURS
FE Warren	1607.00	Vandenberg	1285.60
Grand Forks	1607.00	Ellsworth/	*
Malmstrom	1607.00	Whiteman	
Minot	1607.00		

Additional Information:

Processes include all of those in the Engineering Flight except Comprehensive Plan Management and adds the following:

- A3.2.2.1. Performs graveling program (\$2Mil)
- A3.2.2.2. Performs as RP/RPIE Depot
- A3.2.2.3. Perform Quality Control
- A3.2.2.4. Ensures Configuration Control
- A3.2.3. Source of Impact. Previously approved SAC Command Manpower Standard.
- A3.2.4. *Special Application Instructions. Ellsworth and Whiteman will be drawing down through FY 97. Reductions should be phased to coincide with the mission drawdown.

- A3.3. Title. Positive Mission Variance for Technical Translation (Language).
- A3.3.1. **Definition.** Provides man-hours to accomplish the technical translation requirements at overseas bases that rely on Host Nation Design and Construction agencies. Use of these host nation agencies results in engineering documentation and correspondence in the host nation language.

A3.3.2. Applicability and Impact:

BASE	MAN-HOURS	BASE	MAN-HOURS
Aviano	160.70	Misawa	179.00
Bitburg	160.70	Osan	146.00
Howard	160.70	Ramstein	321.40
Kadena	298.00	Rhein Main	160.70
Kunsan	146.00	Spangdahlem	160.70
Lajes	160.70	Yokota	149.00

- A3.3.3. **Source of Impact.** Workshop measurement.
- A3.3.4. Special Application Instructions. None.
- **A3.4.** Title. Negative Mission Variance for No Active Runways at an Installation.
- A3.4.1. **Definition.** Workload reduction caused by not having a runway at an installation.

A3.4.2. Applicability and Impact:

BASE	MAN-HOURS	BASE	MAN-HOURS
Bolling	-80.00	Goodfellow	-80.00
Brooks	-80.00	Hanscom	-80.00
Cheyenne Mountain	-80.00	Lackland	-80.00
FE Warren	-80.00		

- A3.4.3. **Source of Impact.** Workshop measurement.
- A3.4.4. **Special Application Instructions.** None.
- A3.5. Title. Positive Mission Variance for Hospitals Greater than 35 Beds.
- A3.5.1. **Definition.** This variance earns man-hours to provide engineering support to hospitals over 35 beds.

A3.5.2. Applicability and Impact:

MAN-HOURS	BASE	MAN-HOURS
321.40	Maxwell	160.70
160.70	Minot	160.70
160.70	Nellis	160.70
160.70	Offutt	160.70
160.70	Scott	321.40
482.10	Sheppard	160.70
	321.40 160.70 160.70 160.70 160.70	321.40 Maxwell 160.70 Minot 160.70 Nellis 160.70 Offutt 160.70 Scott

Lackland	482.10	Travis	321.40
Langley	160.70	USAF Academy	160.70
Little Rock	160.70	Vandenberg	160.70
Luke	160.70	Wright-Patterson	160.70
MacDill	160.70	-	

- A3.5.3. **Source of Impact.** Workshop measurement.
- A3.5.4. **Special Application Instructions.** None.
- A3.6. Title. Positive Mission Variance for Base Operations and Maintenance Service (BOMS) Contracts.
- A3.6.1. **Definition.** This variance provides additional manpower for the host base in support of BOMS contracts that include writing and modifying the statement of work, developing performance evaluation checklists, participating in source selection evaluation boards for contractors, administering contracts including claims and change orders, and performing mobile quality assurance evaluation (MQAE) duties for site support. In addition, certain BOMS contracts require the government to perform the real property by maintenance contract (RPMC) and MILCON program.

A3.6.2. **Applicability and Impact.** This variance applies to the following bases:

BASE	MAN-HOURS	BASE	MAN-HOURS
Andersen	80.00	Peterson	2731.19
Osan	350.00	Shaw	20.00
Patrick	1250.00	Vandenberg	64.58

- A3.6.3. **Source of Impact.** Workshop measurement.
- A3.6.4. **Special Application Instructions.** None.
- **A3.7. Title.** Positive/Negative Mission Variance for Leveling.
- A3.7.1. **Definition.** One of the goals of the CE objective flight AFMS development effort was to create AFMSs that would, as fairly as possible, level available authorizations between bases given a certain workload. Past manpower funding and management decisions resulted in a considerable disparity between bases with equal work. Consequently, AFMSs were developed that eliminated the disparity. However, during staffing of the AFMSs, it was determined that the leveling effect should be limited to a certain percentage of existing resources. The MAJCOM Integration Review Team (MIR III) established this limit at +/- 20% of the core. This variance brings those bases that exceeded this limit back into the acceptable range established by the MIR by adding or subtracting the man-hour impact shown below from the affected base's core man-hour requirement.

A3.7.2. **Applicability and Impact.** This variance applies to the Engineering Flight at the following bases:

BASE	MAN-HOURS	BASE	MAN-HOURS
Barksdale	505.52	Laughlin	-179.03
Bitburg	-517.80	Luke	43.57
Charleston	-478.73	MacDill	1703.74
Cheyenne Mountain	508.25	Malmstrom	288.88
Edwards	-610.68	Maxwell	-1694.52
FE Warren	643.19	McClellan	559.30
Goodfellow	-255.97	Randolph	-530.33

Hickam	2185.19	Travis	-2040.89
Hill	1169.53	Vandenberg	-694.93
Hurlburt	-474.68	Whiteman	1207.07
Keesler	-2825.80	Yokota	353.86
Kunsan	622.51		
Lackland	-1857.19		

- A3.7.3. **Source of Impact.** MAJCOM Integration Review Team-directed variance.
- A3.7.4. **Special Application Instructions.** The AFSC requirements are driven by local conditions.
- A3.8. Title. Positive Mission Variance for Facilities Planning Support.
- A3.8.1. **Definition.** This variance quantifies man-hours allocated by the MAJCOM Integration Review Team for special facilities planning support at Bolling AFB and the USAF Academy only.
- A3.8.2. **Applicability and Impact.** This variance applies to the Engineering Flight at the following bases:

BASE	MAN-HOURS
Bolling	321.40
USAF Academy	321.40

- A3.8.3. Source of Impact. MAJCOM Integration Review Team-directed variance.
- A3.8.4. **Special Application Instructions.** One authorization at each location can be a military officer. The AFSC requirements are driven by local conditions.
- A3.9. Title. Positive Mission Variance for Depot Support Technology Center.
- A3.9.1 **Definition.** This variance provides additional engineering support services required for highly technical and complex organizations.
- A3.9.2. **Applicability and Impact.** This variance applies to the following bases:

BASE	MAN-HOURS	
Hill	1414.16	
McClellan	1542.72	
Wright-Patterson	6299.44	

- A3.9.3. Source of Impact. MAJCOM-validated estimate.
- A3.9.4. **Special Application Instructions.** Estimated man-hours are only for those projects associated with unique facilities approved by the MAJCOM Integration Review Team

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PROCESS ANALYSIS SUMMARY (IN PRIORITY ORDER)

ENGINEERING FLIGHT

PROCESS TITLE	AVERAGE PROCESS ACCOMPLISHMENT TIME (MAN-HOURS	PROJECTED WORKLOAD
TRAINS FOR WAR	8.00	9 MIL TRAINED/BI-WEEKLY
COORDINATES AND MANAGES BASE COMPRE- HENSIVE PLAN	1007.80	1 UPDATED ANNUAL PLAN
DEVELOPS CONTRACT PROGRAMS	35.45	*86 PROJECTS/YEAR
DESIGNS PROJECTS	346.26	*66 PROJECTS/YEAR
OVERSEES/MANAGES CONSTRUCTION	179.72	*66 PROJECTS/YEAR

^{* 36} SABER projects are included in the average.

★ BASE AGE SWITCH

	AGE		AGE
BASE	SWITCH	BASE	SWITCH
Altus	0	Lackland	0
Andersen	0	Lajes	0
Andrews	0	Langley	1
Aviano	1	Laughlin	0
Barksdale	1	Little Rock	0
Beale	1	Luke	0
Bitburg	0	MacDill	0
Bolling	1	Malmstrom	0
Brooks	1	Maxwell	1
Cannon	0	McChord	1
Charleston	0	McClellan	1
Cheyenne Mountain	0	McConnell	0
Columbus	0	Minot	0
Davis-Monthan	1	Misawa	0
Dover	0	Moody	0
Dyess	0	Mountain Home	0
Edwards	1	Nellis	0
Eglin	1	Offutt	1
Eielson	0	Osan	0
Ellsworth	0	Patrick	0
Elmendorf	0	Peterson	0
Fairchild	0	Pope	1
FE Warren	1	Ramstein	0
Goodfellow	0	Randolph	1
Grand Forks	0	Rhein Main	1
Hanscom	1	Robins	0
Hickam	1	Scott	1
Hill	0	Seymour Johnson	0
Holloman	0	Shaw	0
Howard	1	Sheppard	0
Hurlburt	0	Spangdahlem	0
Kadena	0	Tinker	0
Keesler	0	Travis	0
Kelly	1	Tyndall	0
Kirtland	0	USAF Academy	0
Kunsan	1	Wright-Patterson	1